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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:	09/990,009
Filing Date:	11/20/2001
Applicant:	Jason F. Hunzinger
Group Art Unit:	2686
Examiner:	Randy Peaches
Title:	ENHANCED INTER-GENERATION CDMA HARD-HANDOFF PROCEDURE
Attorney Docket:	4041L-000097

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

PETITION REQUESTING WITHDRAWAL OF HOLDING OF ABANDONMENT UNDER 37 CFR 1.181(a)

Sir:

Applicant respectfully requests the Withdrawal of Holding of Abandonment in the above identified patent application. A statement of the facts as known by the Applicant is presented below.

1. Examiner Peaches telephoned the undersigned on January 4, 2005 to determine the status of the application. Applicant's attorney then accessed the USPTO's PAIR system to review the status of the application.

2. A Non-Final Office Action was mailed by the USPTO on July 1, 2004 as indicated on the PAIR Image File Wrapper listing. (Appendix A)

3. This Office Action was returned to the USPTO on July 6, 2004 as being undelivered as indicated on the PAIR Image File Wrapper listing. (Appendix A)

4. The mailing address for the Office Action was the same as the mailing address of the Notice of Acceptance of Power of Attorney which Applicant received. See Appendix B, the Notice of Acceptance of Power of Attorney and Appendix C, a copy of the Office Action downloaded from the PAIR system, specifically the mailing cover sheet.

5. Applicant believes the above statement of facts clearly indicates that Applicant has never received the July 1, 2004 Office Action. In order to further demonstrate that this Office Action was never received, a copy of Applicant's docket for October 1, November 1 and December 1 (the due dates for response) is provided in Appendix D.

Applicant respectfully requests the withdrawal of any holding of abandonment and the re-mailing of the July 1, 2004 Office Action with restarting of the period for response.

CONCLUSION

If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: January 13, 2005

By: _____
Michael J. Schmidt, 34,007

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600

MJS/pmg

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Image File Wrapper for Application No.:09/990,009

NEW *Changes to IFW Download* - Updated:11/30/2004

This application is officially maintained in electronic form. To View: Click the desired Document Description. To Download and Print: Check the desired document(s) and click Download.

Mail Room Date	Document Description	Document Category	Page Count	All None Download
07/06/2004	Mail returned to USPTO as undelivered	PROSECUTION	21	☐
07/01/2004	Non-Final Rejection	PROSECUTION	19	☐
04/09/2003	Pre-Exam Formalities Notice	PROSECUTION	1	☐
12/09/2002	Change in Power of Attorney (May include Associate POA)	PROSECUTION	3	☐
11/20/2001	Fee Worksheet (PTO-875)	PROSECUTION	1	☐
11/20/2001	Claims Worksheet (PTO-2022)	PROSECUTION	1	☐
11/20/2001	Issue Information on File Wrapper	PROSECUTION	1	☐
11/20/2001	Search info on File Wrapper	PROSECUTION	1	☐
11/20/2001	Claims recorded on File Wrapper	PROSECUTION	1	☐
11/20/2001	Transmittal of New Application	PROSECUTION	2	☐
11/20/2001	Drawings	PROSECUTION	4	☐
11/20/2001	Specification	PROSECUTION	16	☐
11/20/2001	Claim	PROSECUTION	7	☐
11/20/2001	Abstract	PROSECUTION	1	☐
11/20/2001	Oath or Declaration filed	PROSECUTION	2	☐

11/20/2001	Fee Worksheet (PTO-875)	PROSECUTION	1	☐
07/01/2004	List of references cited by Examiner	PRIOR ART	1	☐
11/20/2001	Transmittal of New Application	AS FILED	2	☐
11/20/2001	Specification	AS FILED	16	☐
11/20/2001	Drawings	AS FILED	4	☐
11/20/2001	Oath or Declaration filed	AS FILED	2	☐
11/20/2001	Abstract	AS FILED	1	☐
11/20/2001	Claim	AS FILED	7	☐

Sorted By : Document Category

40412-000097 /HKM /MJS

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
Washington, DC 20231
www.uspto.gov

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
09/990,009	11/20/2001	Jason F. Hunzinger	09752-141001

CONFIRMATION NO. 2435

OC000000009801587

27573
HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

Date Mailed: 04/09/2003

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 12/09/2002.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

Anthony Tyson

ANTHONY TYSON
2600 (703) 308-8231

ATTORNEY/APPLICANT COPY

TC2600 PK2

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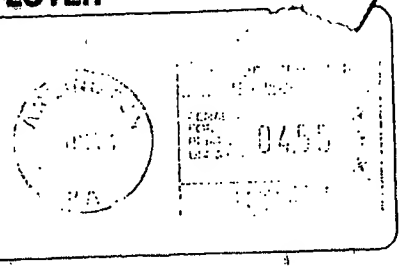

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/990,009	11/20/2001	Jason F. Hunzinger	09752-141001	2435

27572 7590 07/01/2004

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER	
PEACHES, RANDY	
ART UNIT	**PAPER NUMBER**
2686	

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/990,009	Applicant(s) HUNZINGER, JASON F.	
	Examiner Randy Peaches	Art Unit 2686	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-32 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-32 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. ***Claims 1-3, 5-12, 16-19, 21-28 and 32*** are rejected under 35 U.S.C. 102(b) as being anticipated by Weaver, Jr. et al (U.S. Patent Number 5,594,718).

Regarding ***claim 1***, Weaver, Jr. et al discloses a method of triggering handoff from a first wireless communication system comprising:

- detecting at least one pilot signal from a second wireless communication system of a different generation from said first wireless communication system. See columns 3,6, and 7 lines 32-39 lines 9-14 lines 21-23, respectively;

- measuring at least border base station, which reads on claimed "one target parameter", from said second wireless communication system. See column 7 lines 13-18;
- measuring at least one source parameter from said first wireless communication system. See column 7 lines 13-18;
- determining a threshold level. See column 7 lines 32-34; and
- detecting when said target parameter exceeds said source parameter by said threshold level. See column 7 line 14.

Regarding ***claim 2***, according to ***claim 1***, Weaver, Jr. et al further teaches of completing handoff to said second wireless communication system upon said detection. See column 7 lines 41-46.

Regarding ***claim 3***, according to ***claim 1***, Weaver, Jr. et al further teaches of adding said at least one pilot from said second wireless communication system to a Candidate set, which reads on claimed "active set". See column 7 lines 6-16.

Regarding ***claim 5***, according to ***claim 1***, Weaver, Jr. et al further teaches wherein at least one of the source parameter or target parameter is a pilot signal strength. See column 7 lines 15-17.

Regarding ***claim 6***, according to ***claim 1***, Weaver, Jr. et al further teaches of sending

instructions for completing a handoff. See column 7 lines 33-46.

Regarding ***claim 7***, according to ***claim 1***, Weaver, Jr. et al further teaches of completing a handoff autonomously. See column 7 lines 40-46.

Regarding ***claim 8***, according to ***claim 1***, Weaver, Jr. et al further teaches of determining a statistic of one or more of said at least one source parameter and said at least one target parameter. See column 7 lines 31-37.

Regarding ***claim 9***, according to ***claim 8***, Weaver, Jr. et al further teaches wherein determining the threshold level comprises computing the threshold level based on said statistic. See column 7 lines 31-37.

Regarding ***claim 10***, according to ***claim 1***, Weaver, Jr. et al further teaches wherein said threshold level is communicated to a mobile station from a base station. See column 7 lines 25-46.

Regarding ***claim 11***, according to ***claim 10***, Weaver, Jr. et al further wherein said communication of said threshold level is part of an inter-generation handoff message. See columns 5 and 6 lines 5-30, 67, lines 1-7.

Regarding ***claim 12***, according to ***claim 2***, Weaver, Jr. et al further teaches wherein a

handoff to said second wireless communication system occurs a predetermined time after said detection is made and remains true. See column 7 lines 30-32.

Regarding ***claim 16***, according to ***claim 1***, Weaver, Jr. et al further teaches wherein determining said threshold value comprises evaluating two or more pilot strengths. See column 2 lines 30-37.

Regarding ***claim 17***, Weaver, Jr. et al discloses a system for enabling handoff from a first wireless communication system to a second wireless communication system comprising:

- a first wireless communication system comprising a plurality of base stations which each transmit a signal. See column 4 lines 10-29;
- a second wireless communication system of a different generation than said first wireless communication system, comprising a plurality of base stations which each transmit a signal. See column 5 lines 5-30 and FIGURE 2;
- a mobile station which detects at least one pilot signal from said second wireless communication system, wherein the mobile station measures at least one target parameter from said second wireless communication system and at least one source parameter from said first wireless communication system, wherein the mobile station determines a threshold level and detects when said target parameter exceeds said source parameter by said threshold level. See column 7 lines 13-18 lines 32-34.

Regarding ***claim 18***, according to ***claim 17***, Weaver, Jr. et al further teaches wherein the mobile station completes handoff to said second wireless communication system upon said detection. See column 7 lines 41-46.

Regarding ***claim 19***, according to ***claim 17***, Weaver, Jr. et al further teaches wherein the mobile station add said at least one pilot from said second wireless communication system to a Candidate set, which reads on claimed "active set". See column 7 lines 6-16.

Regarding ***claim 21***, according to ***claim 17***, Weaver, Jr. et al further teaches wherein at least one of said source parameter or target parameter is a pilot signal strength. See column 7 lines 15-17.

Regarding ***claim 22***, according to ***claim 17***, Weaver, Jr. et al further wherein said mobile station receives instructions for handoff from a base station. See column 7 lines 40-44.

Regarding ***claim 23***, according to ***claim 17***, Weaver, Jr. et al further wherein said mobile station completes handoff autonomously. See column 7 lines 40-46.

Regarding ***claim 24***, according to ***claim 17***, Weaver, Jr. et al further wherein said

mobile station determines a statistic of one or more of said at least one source parameter and said at least one target parameter. See column 7 lines 31-37.

Regarding ***claim 25***, according to ***claim 24***, Weaver, Jr. et al further wherein said mobile station computes the threshold level based on said statistic. See column 7 lines 31-37.

Regarding ***claim 26***, according to ***claim 17***, Weaver, Jr. et al further teaches wherein said mobile station receives said threshold level from a base station. See column 7 lines 25-46.

Regarding ***claim 27***, according to ***claim 26***, Weaver, Jr. et al further teaches wherein said threshold level is part of an inter-generation handoff message. See columns 5 and 6 lines 5-30, 67, lines 1-7.

Regarding ***claim 28***, according to ***claim 17***, Weaver, Jr. et al further teaches wherein said mobile station hands off to said second wireless communication system after a predetermined time elapses since said detection is made and remains true. See column 7 lines 30-32.

Regarding ***claim 32***, according to ***claim 17***, Weaver, Jr. et al further teaches wherein said mobile station determines said threshold value by evaluating two or more pilot strengths.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. ***Claims 15 and 31*** rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver, Jr. et al (U.S. Patent Number 5,594,718) as applied to ***claims 1-3, 5-12, 16-19, 21-28 and 32*** above, and further in view of Soliman (U.S. Patent Number 6,321,090 B1).

Regarding ***claim 15***, according to ***claim 1***, Weaver, Jr. et al discloses a method of triggering handoff from a first wireless communication system comprising:

- detecting at least one pilot signal from a second wireless communication system of a different generation from said first wireless communication system. See columns 3,7, and 7 lines 32-39 lines 9-14 lines 21-23, respectively;
- measuring at least border base station, which reads on claimed "one target parameter", from said second wireless communication system. See column 7 lines 13-18;
- measuring at least one source parameter from said first wireless communication system. See column 7 lines 13-18;
- determining a threshold level. See column 7 lines 32-34; and

- detecting when said target parameter exceeds said source parameter by said threshold level. See column 7 line 14.

However, Weaver, Jr. et al. does not disclose wherein at least one of said source parameter or target parameter is a round-trip delay value.

Soliman teaches in column 16 lines 16-34, where the round trip delay (RTD) value is received by the wireless device as a parameter from the base station controller.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Weaver, Jr. et al (U.S. Patent Number 5,594,718) to include Soliman (U.S. Patent Number 6,321,090 B1) in order to utilize a comparing parameter to determine the necessity to perform a handover procedure.

Regarding ***claim 31***, according to ***claim 17***, Weaver, Jr. et al discloses a system for enabling handoff from a first wireless communication system to a second wireless communication system comprising:

- a first wireless communication system comprising a plurality of base stations which each transmit a signal. See column 4 lines 10-29;
- a second wireless communication system of a different generation than said first wireless communication system, comprising a plurality of base stations which each transmit a signal. See column 5 lines 5-30 and FIGURE 2;
- a mobile station which detects at least one pilot signal from said second wireless communication system, wherein the mobile station measures at least one target

parameter from said second wireless communication system and at least one source parameter from said first wireless communication system, wherein the mobile station determines a threshold level and detects when said target parameter exceeds said source parameter by said threshold level. See column 7 lines 13-18 lines 32-34.

However, Weaver, Jr. et al. does not disclose wherein at least one of said source parameter or target parameter is a round-trip delay value.

Soliman teaches in column 16 lines 16-34, where the round trip delay (RTD) value is received by the wireless device as a parameter from the base station controller.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Weaver, Jr. et al (U.S. Patent Number 5,594,718) to include Soliman (U.S. Patent Number 6,321,090 B1) in order to utilize a comparing parameter to determine the necessity to perform a handover procedure.

3. ***Claims 4 and 20*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver, Jr. et al (U.S. Patent Number 5,594,718) as applied to ***claims 1-3, 5-12, 16-19, 21-28 and 32*** above, and further in view of Soliman (U.S. Patent Number 6,055,428 B1).

Regarding ***claim 4***, according to ***claim 1***, Weaver, Jr. et al discloses a method of triggering handoff from a first wireless communication system comprising:

- detecting at least one pilot signal from a second wireless communication system of a different generation from said first wireless communication system. See columns 3,7, and 7 lines 32-39 lines 9-14 lines 21-23, respectively;
- measuring at least border base station, which reads on claimed "one target parameter", from said second wireless communication system. See column 7 lines 13-18;
- measuring at least one source parameter from said first wireless communication system. See column 7 lines 13-18;
- determining a threshold level. See column 7 lines 32-34; and
- detecting when said target parameter exceeds said source parameter by said threshold level. See column 7 line 14.

However, Weaver, Jr. et al. does not disclose where the threshold can be dynamically adjusted.

Soliman discloses in column 3 and 4 lines 65-67 lines 1-7 where the thresholds are able to by dynamically adjusted.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Weaver, Jr. et al (U.S. Patent Number 5,594,718) to include Soliman (U.S. Patent Number 6,055,428 B1) in order for the system to be able to adjust the threshold to prevent or allow a handover procedure to occur. Additionally, the flexibility in the dynamic adjusting of the threshold allows the system to adjust to the changes in transmission quality of different channels and therefore, efficiently handle the network resources better.

Regarding ***claim 20***, according to ***claim 17***, Weaver, Jr. et al discloses a system for enabling handoff from a first wireless communication system to a second wireless communication system comprising:

- a first wireless communication system comprising a plurality of base stations which each transmit a signal. See column 4 lines 10-29;
- a second wireless communication system of a different generation than said first wireless communication system, comprising a plurality of base stations which each transmit a signal. See column 5 lines 5-30 and FIGURE 2;
- a mobile station which detects at least one pilot signal from said second wireless communication system, wherein the mobile station measures at least one target parameter from said second wireless communication system and at least one source parameter from said first wireless communication system, wherein the mobile station determines a threshold level and detects when said target parameter exceeds said source parameter by said threshold level. See column 7 lines 13-18 lines 32-34.

However, Weaver, Jr. et al. does not disclose where the threshold can be dynamically adjusted.

Soliman discloses in column 3 and 4 lines 65-67 lines 1-7 where the thresholds are able to by dynamically adjusted.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Weaver, Jr. et al (U.S. Patent

Number 5,594,718) to include Soliman (U.S. Patent Number 6,055,428 B1) in order for the system to be able to adjust the threshold to prevent or allow a handover procedure to occur. Additionally, the flexibility in the dynamic adjusting of the threshold allows the system to adjust to the changes in transmission quality of different channels and therefore, efficiently handle the network resources better.

4. ***Claims 14 and 30*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver, Jr. et al (U.S. Patent Number 5,594,718) as applied to ***claims 1-3, 5-12, 16-19, 21-28 and 32*** above, and further in view of Jetzek (U.S. Patent Number 6,754,493 B1).

Regarding ***claim 14***, according to ***claim 1***, Weaver, Jr. et al discloses a method of triggering handoff from a first wireless communication system comprising:

- detecting at least one pilot signal from a second wireless communication system of a different generation from said first wireless communication system. See columns 3,7, and 7 lines 32-39 lines 9-14 lines 21-23, respectively;
- measuring at least border base station, which reads on claimed "one target parameter", from said second wireless communication system. See column 7 lines 13-18;
- measuring at least one source parameter from said first wireless communication system. See column 7 lines 13-18;
- determining a threshold level. See column 7 lines 32-34; and

- detecting when said target parameter exceeds said source parameter by said threshold level. See column 7 line 14.

However, Weaver, Jr. et al. does not disclose determining said threshold level comprises calculating said threshold value.

Jetzek teaches in column 7 lines 3-50, of a method to determine the threshold values of a system.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Weaver, Jr. et al (U.S. Patent Number 5,594,718) to include Jetzek (U.S. Patent Number 6,754,493 B1) in order for the system to be able to adjust the threshold to prevent or allow a handover procedure to occur. Additionally, the flexibility in the dynamic adjusting of the threshold allows the system to adjust to the changes in transmission quality of different channels and therefore, efficiently handle the network resources better.

Regarding ***claim 30***, according to ***claim 17***, Weaver, Jr. et al discloses a system for enabling handoff from a first wireless communication system to a second wireless communication system comprising:

- a first wireless communication system comprising a plurality of base stations which each transmit a signal. See column 4 lines 10-29;
- a second wireless communication system of a different generation than said first wireless communication system, comprising a plurality of base stations which each transmit a signal. See column 5 lines 5-30 and FIGURE 2;

- a mobile station which detects at least one pilot signal from said second wireless communication system, wherein the mobile station measures at least one target parameter from said second wireless communication system and at least one source parameter from said first wireless communication system, wherein the mobile station determines a threshold level and detects when said target parameter exceeds said source parameter by said threshold level. See column 7 lines 13-18 lines 32-34.

However, Weaver, Jr. et al. does not disclose determining said threshold level comprises calculating said threshold value.

Jetzek teaches in column 7 lines 3-50, of a method to determine the threshold values of a system.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Weaver, Jr. et al (U.S. Patent Number 5,594,718) to include Jetzek (U.S. Patent Number 6,754,493 B1) in order for the system to be able to adjust the threshold to prevent or allow a handover procedure to occur. Additionally, the flexibility in the dynamic adjusting of the threshold allows the system to adjust to the changes in transmission quality of different channels and therefore, efficiently handle the network resources better.

5. ***Claims 13 and 29*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Weaver, Jr. et al (U.S. Patent Number 5,594,718) as applied to ***claims 1-3, 5-12, 16-19, 21-28 and 32*** above, and further in view of Shin (U.S. Patent Number 6,549,524 B1).

Regarding ***claims 13 and 29***, according to ***claim 12 and 28***, Weaver, Jr. et al further teaches wherein said mobile station hands off to said second wireless communication system after a predetermined time elapses since said detection is made and remains true. See column 7 lines 30-32. Additionally, Weaver, Jr. et al. discloses a method of triggering handoff from a first wireless communication system comprising:

- detecting at least one pilot signal from a second wireless communication system of a different generation from said first wireless communication system. See columns 3,7, and 7 lines 32-39 lines 9-14 lines 21-23, respectively;
- measuring at least border base station, which reads on claimed "one target parameter", from said second wireless communication system. See column 7 lines 13-18;
- measuring at least one source parameter from said first wireless communication system. See column 7 lines 13-18;
- determining a threshold level. See column 7 lines 32-34; and
- detecting when said target parameter exceeds said source parameter by said threshold level. See column 7 line 14.

- a mobile station which detects at least one pilot signal from said second wireless communication system, wherein the mobile station measures at least one target parameter from said second wireless communication system and at least one source parameter from said first wireless communication system, wherein the mobile station determines a threshold level and detects when said target parameter exceeds said source parameter by said threshold level. See column 7 lines 13-18 lines 32-34.

However, Weaver, Jr. et al. does not disclose where predetermined time for a handoff process is calculated based on the criteria stated above.

Shin teaches in column 4 lines 9-10 of deciding a point of time, which reads on claimed "predetermined time", to allow a hand off to occur. See column 9 and 10 line 20-30 lines 8-24.

Therefore, at the time of the invention it would have been obvious to a person of ordinary skilled in the art to modify the teachings of Weaver, Jr. et al (U.S. Patent Number 5,594,718) to include Shin (U.S. Patent Number 6,549,524 B1) in order to increase the efficiency of the hand off time. The dynamic calculation of the said point of time will allow a smoother transition of signal from network to network.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy Peaches whose telephone number is (703) 305-8993. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Randy Peaches
June 24, 2004

Nguyen Vo
6-27-04

NGUYEN T. VO
PRIMARY EXAMINER

Notice of References Cited

Application/Control No.	Applicant(s)/Patent Under Reexamination	
09/990,009	HUNZINGER, JASON F.	
Examiner	Art Unit	Page 1 of 1
Randy Peaches	2686	

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	B	US-6,055,428 A	04-2000	Soliman, Samir S.	455/437
	C	US-6,321,090 B1	11-2001	Soliman, Samir S.	455/440
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	I	US-			
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	K	US-			
	L	US-			
	M	US-			

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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
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NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

HARNESS DICKEY

3-Month Docket Report

for

Schmidt, Michael J

October 2004 thru December 2004

HARNESS DICKEY

Troy

Attorney Patent Docket U.S. & Foreign

October 2004

Schmidt, Michael J

Due Date	HDP Case ID/Client Ref.	Attys	Client Title/Mark	Appln No--Filing Date Patent No--Issue Date	Action Due
10/02/2004	4041J-000229/US/DVA 52203-USD-SN	HKM MJS	Denso Corporation Cooling Apparatus Boiling And Condensing Refrigerant	09/779141 -- 02/08/2001	**Appeal Due**
10/02/2004	4041J-000229/US/DVA 52203-USD-SN	HKM MJS	Denso Corporation Cooling Apparatus Boiling And Condensing Refrigerant	09/779141 -- 02/08/2001	**3 Mo Final OA Due**
10/03/2004	1316C-100066/JP	HKM MJS	Tenneco Automotive Operating Torque Rod Bearing Assembly	21204999 -- 07/27/1999	**Foreign Fees** reg fee/1-3 taxes
10/03/2004	1316I-101634/DE	HKM MJS	Tenneco Automotive Operating Single Piece Piston	10035640.0 -- 07/21/2000	**Foreign Response**
10/03/2004	4041L-000010/US 52230-US	HKM MJS	Denso Corporation Customizing Audio Output To A User's Hearing In A Digital Telephone	09/170988 -- 10/13/1998 6212496 -- 04/03/2001	**Maintenance Fee-3.5 yr***
10/03/2004	7939A-000031/US	HKM MJS	Algonquin Automotive Method Of Precisely Joining An Accessory Such As A Running Board To An Attachment Bracket	10/726819 -- 12/03/2003	**Foreign Filing - 10 Mo Reminder***
10/04/2004	4041J-000327/US/DVA 54311-US	HKM MJS	Denso Corporation Radiator For Supercritical Vapor Compression Type Refrigerating Cycle	10/280961 -- 10/25/2002	**Appeal Due + 1**
10/04/2004	4041J-000327/US/DVA 54311-US	HKM MJS	Denso Corporation Radiator For Supercritical Vapor Compression Type Refrigerating Cycle	10/280961 -- 10/25/2002	**3 Mo Final OA + 1**
10/04/2004	4041J-000601/US 51697-US	HKM MJS	Denso Corporation Radio Communication Terminal Having Variable Data Transmission Speed Responsive To Built-In	09/354945 -- 07/15/1999	**Appeal Due + 1**

Due Date	HDP Case ID/Client Ref.	Attys	Client Title/Mark	Appln No--Filing Date Patent No--Issue Date	Action Due
10/30/2004	4041O-000019/US 65389-US-TO	HKM MJS	Denso Corporation Automotive Air-Conditioner Having Aspirator For Temperature Sensor	10/627111 -- 07/25/2003	**Restriction/Species + 1**
10/31/2004	1316I-101639/BR/02	HKM MJS	Tenneco Automotive Operating Frequency Dependant Damper	PI01049020 -- 10/31/2001	**Request Exam**
10/31/2004	1316N-001653/US 1367/1378/1373/1374	HKM MJS	Tenneco Automotive Operating Thermal Expansion Compensation Shock Absorber	10/671354 -- 09/25/2003	**Restriction/Species + 1**
10/31/2004	4041J-000674/US 62944-US-SI	HKM MJS	Denso Corporation GPS Receiver System	10/329254 -- 12/23/2002	**Cert Priority Doc Sent? (if required)**

Due Date	HDP Case ID/Client Ref.	Attys	Client Title/Mark	Appln No--Filing Date Patent No--Issue Date	Action Due
11/02/2004	4041J-000229/US/DVA 52203-USD-SN	HKM MJS	Denso Corporation Cooling Apparatus Boiling And Condensing Refrigerant	09/779141 -- 02/08/2001	**Appeal Due + 1**
11/02/2004	4041J-000229/US/DVA 52203-USD-SN	HKM MJS	Denso Corporation Cooling Apparatus Boiling And Condensing Refrigerant	09/779141 -- 02/08/2001	**3 Mo Final OA + 1**
11/02/2004	4041J-000738/US 65102-US	HKM MJS	Denso Corporation Wireless Communication Terminal	10/612469 -- 07/03/2003	**Update Status**
11/03/2004	1316N-001670/US 2938	HKM MJS	Tenneco Automotive Operating Alternative By-Pass Designs For Stroke Dependent Damping	10/662547 -- 09/15/2003	**Appeal Due**
11/03/2004	1316N-001670/US 2938	HKM MJS	Tenneco Automotive Operating Alternative By-Pass Designs For Stroke Dependent Damping	10/662547 -- 09/15/2003	**3 Mo Final OA Due**
11/03/2004	4041J-000452/US/DVE 41069-USPD2CD-JSJ/NK	HKM MJS	Denso Corporation Automotive Air Conditioner	09/816384 -- 03/26/2001	**Cert Priority Doc Sent? (if required)**
11/03/2004	4041J-000733/US 65151-US	HKM MJS	Denso Corporation Ejector With Throttle Controllable Nozzle And Ejector Cycle Using The Same	10/614361 -- 07/07/2003	**3 Mo OA (1st) Due**
11/03/2004	4041O-000014/US 56059-US	HKM MJS	Denso Corporation Battery-Powered Mobile Phone Having Additional Functions	09/827820 -- 04/06/2001	**Appeal Due**
11/03/2004	4041O-000014/US 56059-US	HKM MJS	Denso Corporation Battery-Powered Mobile Phone Having Additional Functions	09/827820 -- 04/06/2001	**3 Mo Final OA Due**

Due Date	HDP Case ID/Client Ref.	Attys	Client Title/Mark	Appln No--Filing Date Patent No--Issue Date	Action Due
11/30/2004	4041O-000019/US 65389-US-TO	HKM MJS	Denso Corporation Automotive Air-Conditioner Having Aspirator For Temperature Sensor	10/627111 -- 07/25/2003	**Restriction/Species + 2**
11/30/2004	4041P-000031/US/DVB U3-9613-TH-A	HKM MJS	Denso Corporation Method And Apparatus For Forming A Casting Which Includes An Insert	09/955095 -- 09/19/2001	**3 Mo OA (1st) Due**

Due Date	HDP Case ID/Client Ref.	Attys	Client Title/Mark	Appln No--Filing Date Patent No--Issue Date	Action Due
12/01/2004	1316I-101660/EP	HKM MJS	Tenneco Automotive Operating Clip Disc	020239943 -- 10/26/2002	**Foreign Documents** designation of countries
12/01/2004	4041A-000007/US	HKM MJS JBM	Denso International America Inc. Vapor Vent Valve For Fuel Pump Module	10/694254 -- 10/27/2003	**3 Mo OA (1st) Due**
12/01/2004	4041J-000063/US/CPA 45381-US-JSJ	HKM MJS	Denso Corporation Air Conditioning Apparatus For Vehicle	08/950826 -- 10/15/1997	**Update Status**
12/01/2004	4041J-000722/US 64483-US	HKM MJS	Denso Corporation Gas-Liquid Separator And Ejector Refrigerant Cycle Using The Same	10/431713 -- 05/08/2003	**3 Mo Final OA Due**
12/01/2004	4041J-000722/US 64483-US	HKM MJS	Denso Corporation Gas-Liquid Separator And Ejector Refrigerant Cycle Using The Same	10/431713 -- 05/08/2003	**Appeal Due**
12/02/2004	1316I-101651/EP	HKM MJS	Tenneco Automotive Operating Floating Port Blocker	020258778 -- 11/19/2002	**Request Exam***
12/02/2004	4041J-000229/US/DVA 52203-USD-SN	HKM MJS	Denso Corporation Cooling Apparatus Boiling And Condensing Refrigerant	09/779141 -- 02/08/2001	**3 Mo Final OA + 2**
12/02/2004	4041J-000229/US/DVA 52203-USD-SN	HKM MJS	Denso Corporation Cooling Apparatus Boiling And Condensing Refrigerant	09/779141 -- 02/08/2001	**Appeal Due + 2**
12/02/2004	4041J-000763/US 68571-US	HKM MJS	Denso Corporation Connecting Structure Of Pipe And Pipe Joint And Method Of Connecting The Pipe To The Pipe	10/653560 -- 09/02/2003	**Update Status**
12/02/2004	4041J-000878/US 69610-US-JSJ	HKM MJS	Denso Corporation Heat Exchanger	10/859488 -- 06/02/2004	**Update Status**

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TRANSMITTAL FORM

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Application Number	09/990,009
Filing Date	11/20/2001
First Named Inventor	Jason F. Hunzinger
Art Unit	2686
Examiner Name	Randy Peaches
Total Number of Pages in This Submission	
Attorney Docket Number	4041L-000097

ENCLOSURES ***(check all that apply)***

- ☐ Fee Transmittal Form
  - ☐ Fee Attached
- ☐ Amendment / Reply
  - ☐ After Final
  - ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☐ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Response to Missing Parts/ Incomplete Application
  - ☐ Response to Missing Parts under 37 CFR 1.52 or 1.53
- ☐ Drawing(s)
- ☐ Licensing-related Papers
- ☒ Petition
- ☐ Petition to Convert to a Provisional Application
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Firm *or* Individual name	Harness, Dickey & Pierce, P.L.C.	Attorney Name Michael J. Schmidt	Reg. No. 34,007
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Date	January 13, 2005		

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